

## PRECIPITATION.

The earlier portion of the month had very general and substantial rains over the greater part of the country from the Rocky Mountains eastward, although over small areas the amounts were insufficient to relieve the drought conditions that had persisted during much of the preceding month.

During the latter half of the month precipitation was very generally deficient over the eastern half of the country, particularly over the Gulf and Atlantic coast States, where drought conditions had become serious by the end of the month.

In the far West precipitation was unusually frequent and in generous quantity over the southern Rocky Mountain and Plateau regions, particularly in Arizona, where numerous local floods were caused by the heavy run-off. In Colorado the average precipitation for the State was the greatest for August of record, and in Arizona only one preceding August in the past 25 years had a greater average. In other portions of the far West precipitation was light as usual for August.

For the month as a whole precipitation was less than usually received over the Atlantic and Gulf States from New England to Texas, the deficiency being of serious

proportions in the South Atlantic States as a whole, and in local areas of the other States. There was a considerable deficiency in Oklahoma, and portions of the Northwest likewise had considerably less rain than is usually received. On the other hand, the Ohio and Mississippi Valley States had frequent and in some cases heavy rains, and the monthly totals were well above the normal amounts, and similar conditions prevailed in Arizona, New Mexico, Colorado, Utah, and portions of the adjoining States.

In all portions of the country there were large variations in the total falls at comparatively near-by points, notably in the South and middle West where amounts ranged locally from less than 1 to more than 10 inches.

## RELATIVE HUMIDITY.

In the main the atmospheric moisture as indicated by the relative humidity conformed to the precipitation conditions, the averages being less than normal in the regions of deficient precipitation, and greater where precipitation was in excess. As a rule the departures from the normal were not excessive, although in portions of the Southwest there were large variations both above and below the normal.

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## SEVERE LOCAL STORMS.

[The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A more complete statement will appear in the Annual Report of the Chief of Bureau.]

Place.	Date.	Time.	Width of path.	Loss of life.	Value of property destroyed.	Character of storm.	Remarks.	Authority.
			Yards.					
Brazil, Ind.	2	P. m.				Electrical and rain.	Damage to buildings and electric wires.	Tribune (Terre Haute, Ind.).
Winfield, Kans., and vicinity.	1	P. m.				Hail.	Automobile tops, street lamps, skylights, and greenhouses demolished.	Times (Kansas City, Mo.).
Independence, Kans.	4	P. m.				Wind.	Severe damage suffered by buildings, crops, and telephone lines.	Do.
Fredonia, Kans.	4	P. m.				Wind and hail.	Buildings, crops, and trees damaged; poultry killed.	Wichita Eagle (Wichita, Kans.).
El Dorado, Kans., and north Butler County.	5	P. m.				Wind.	Heavy losses to gas and oil companies.	Do.
Port Huron, Mich. (north of).	6				\$25,000	Hail.		Official U. S. Weather Bureau.
Kansas City, Mo.	6	4.30 a. m.				Wind, rain, and electrical.	Considerable damage; heaviest losses sustained by telephone and electric light companies.	Star (Kansas City, Mo.).
Lawrence, Kans.	6					Rain.	5.30 inches of rain; cellars flooded.	Do.
Cleveland, Ohio.	6	P. m.		1		Electrical, wind, and rain.	Streets and cellars flooded; wires down; heavy property losses.	Plain Dealer (Cleveland, Ohio).
Denton, Tex.	7	P. m.			25,000	Electrical.	\$25,000 damage from fires by lightning.	Dallas Morning News (Dallas, Tex.).
Annapolis, Md.	7					Wind.	Air-marine seaplane wrecked.	Washington (D. C.) Herald.
New York City and vicinity.	7	P. m.		2		Thunderstorm.	Many persons injured by lightning.	Brooklyn Daily Eagle.
Aberdeen, S. Dak.	9					Wind.	General damage done; two persons injured.	The Courier News (Fargo, N. Dak.).
Egeland, N. Dak.	10		5,280			Hail and wind.	High winds move barns and granaries and demolish small buildings.	The Fargo Forum (Fargo, N. Dak.).
Charleston, S. C.	10	A. m.			1,200	Small tornado.	Damage slight.	Official U. S. Weather Bureau.
Sedalia, Mo.	10	P. m.		1	10,000	Wind and rain.	Considerable property damage done.	Star (Kansas City, Mo.).
Topeka, Kans., and vicinity.	10	P. m.				Rain.	Aside from flooded basements, little damage was done.	Do.
Southern Wisconsin and northern Illinois.	19	P. m.				Wind and rain.	A severe wind and rain storm of wide extent swept over southern Wisconsin and northern Illinois, causing extensive property and public utilities losses; crops and live stock suffered severely and a number of people were killed; the loss is estimated at \$1,000,000 or more.	Press (Sheboygan, Wis.); Official U. S. Weather Bureau; Times Journal (Dubuque, Iowa); Evening News (Kenosha, Wis.); Journal (Chicago, Ill.).
Phoenix, Ariz., northwest of.	19	P. m.		1	200,000	do.	Buildings destroyed; wires down; streets flooded.	Arizona Republican (Phoenix, Ariz.).
Phoenix, Ariz. (near).	21				240,000	Rain.	A heavy rain over the Cave Creek watershed, near Phoenix, resulted in a flood of serious proportions in Phoenix.	Official U. S. Weather Bureau.
Fargo, N. Dak., and vicinity.	25	P. m.				Cloudburst.	Considerable damage caused by rain.	Courier News (Fargo, N. Dak.).
Elizabethtown, Tenn.	25						Serious injury to crops over small area; chickens and birds killed.	Official U. S. Weather Bureau.
Denton, Tex.	26					Cloudburst and wind.	Slight damage to buildings.	Dallas Morning News (Dallas, Tex.).
Corsicana, Tex.	26					Rain.	Cotton slightly damaged.	Do.
Luling, Tex.	26					Wind and rain.	Slight general damage.	Do.
Green Bay, Wis.	26					Thunderstorm.	Much damage to electric wires; damage estimated at thousands of dollars.	Official U. S. Weather Bureau.
Port Huron, Mich. (north of).	30	P. m.				do.	Trees uprooted.	Do.
Texas.	26					Wind and rain.	Heat wave which prevailed throughout the State was broken by wind and rain storms; no severe damage was done.	Dallas Morning News (Dallas, Tex.).